

SPOT CORE I/O

BostonDynamics



Spot CORE I/O **enhances** both the **computation and communications** available on the Spot platform and makes it easy to **configure inputs and outputs**. Connect sensors, cameras, and other devices to Spot and process the data collected into **actionable insights**.

FEATURES AND BENEFITS



ADDITIONAL COMPUTATION

Dedicated processing via CPU and GPU for sensor integrations requiring on-robot computation.



ENHANCED COMMUNICATION

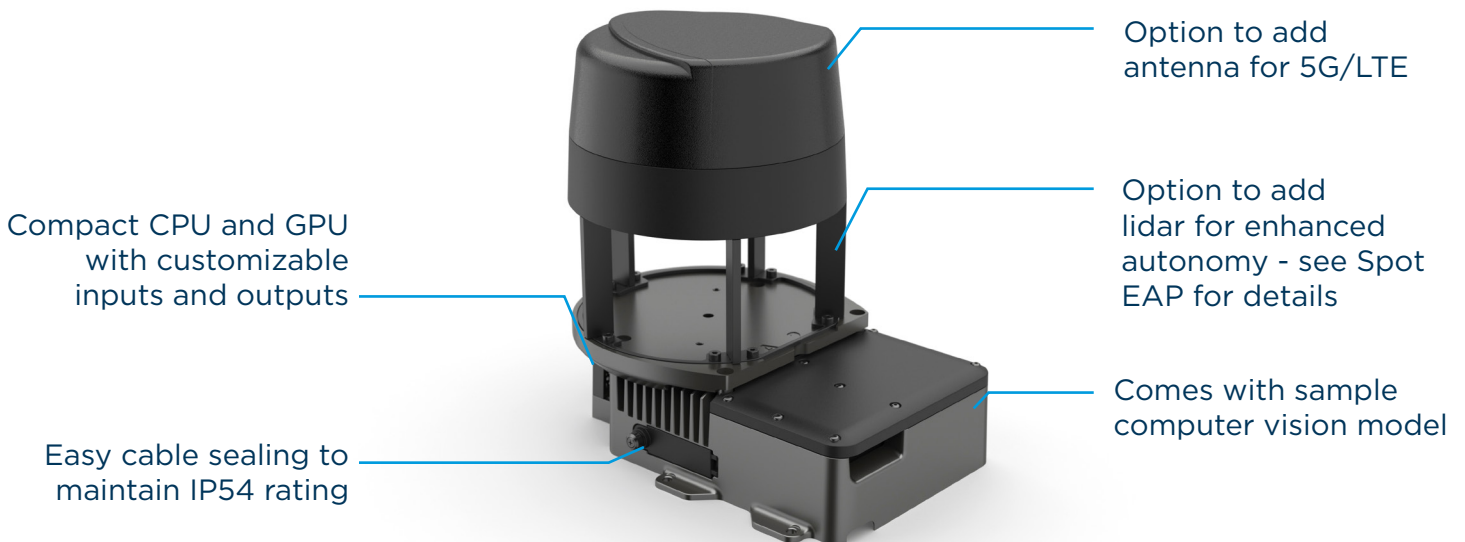
Built-in 5G/LTE modem, CBRS support for private LTE networks, and access to two Ethernet ports.



FLEXIBLE CONNECTIVITY

Easy-to-use, weather-sealed connectivity, including GPIO, E-Stop, and multiple power options.

CONFIGURATION DETAILS



SPECIFICATIONS

PROCESSING (JETSON XAVIER NX)

CPU	6-core NVIDIA Carmel ARM V8.2 64-bit CPU with 6MB Lw + 4MB L3 cache
GPU	384-core NVIDIA Volta GPU with 48 Tensor cores
Memory	16GB 128-bit LPDDR4x at 51.2 GB/s

DIMENSIONS

Length	224 mm (8.8 in)
Width	173 mm (6.8 in)
Height (with antenna)	246 mm (9.7 in)
Height (without antenna)	64 mm (2.5 in)

ENVIRONMENT

Storage Temperature	-40 to 70°C
Operating Temperature	-20 to 45°C
Ingress Protection	IP54

CONNECTIVITY AND STORAGE

5G/LTE	User-installable SIM card
Ethernet	GbE interface, unmanaged 2 port Ethernet switch for additional connectivity
USB 3.1	2x USB 3.1 ports with support for 4.5W
USB-C	1x USB-C port with support for 50W power delivery and video out
SD Card	1x SD card slot

Other Connections	E-Stop interface PPS output GPIO (Configurable to PWM output) I2C Ports
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Power Outputs	48V or robot battery voltage for Spot Explorer models 24V, 50W 12V, 50W 5V, 30W
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SECURITY

Disk Encryption	SSD encrypted with standard LUKS technology
Network Encryption	Connections encrypted with TLS 1.2 and 1.3
Authentication	Access to services restricted to authenticated users
Secure Boot	Tamper-proof filesystem with hardware root of trust
Firmware Verification	Firmware updates must be cryptographically signed

AVAILABLE FOR PRE-ORDER ONLY

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